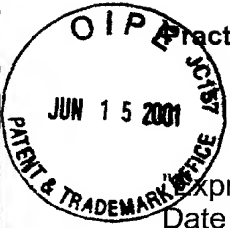


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PCT. \$

JC17 Rec'd PCT/PTO 15 JUN 2001



Practitioner's Docket No. GR 98 P 5624

CHAPTER II

Express Mail" mailing label number EL758656001US
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I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Michael Burns

MICHAEL BURNS

**TRANSMITTAL LETTER
TO THE UNITED STATES ELECTED OFFICE (EO/US)**

(ENTRY INTO U.S. NATIONAL PHASE UNDER CHAPTER II)

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE
PCT/EP99/10119	20 December 1999	23 December 1998

TITLE OF INVENTION

UNIT FOR AUTOMATICALLY CRIMPING RIBBONS OF FLEXIBLE FLAT CABLE AND
CORRESPONDING CRIMPING PROCESS

APPLICANT
HELLEMAN, Roel

Box PCT
Assistant Commissioner for Patents
Washington D.C. 20231
ATTENTION: EO/US

1. Applicant herewith submits to the United States Elected Office (EO/US) the following items under 35 U.S.C. 371:
 - a. ☒ This express request to immediately begin national examination procedures (35 U.S.C. 371(f)).
 - b. ☒ The U.S. National Fee (35 U.S.C. 371(c)(1)) and other fees (37 C.F.R. § 1.492) as indicated below:

09/868567

JC18 Rec'd PCT/PTO 1 5 JUN 2001

2. Fees

CLAIMS FEE	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
[]*	TOTAL CLAIMS	7 - 20 =		x \$ =	
	INDEPENDENT CLAIMS	1 - 3 =		x \$ =	
	MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$270.00				
BASIC FEE**	<p>[] U.S. PTO WAS INTERNATIONAL PRELIMINARY EXAMINATION AUTHORITY Where an International preliminary examination fee as set forth in § 1.482 has been paid on the international application to the U.S. PTO:</p> <p>[] and the international preliminary examination report states that the criteria of novelty, inventive step (non-obviousness) and industrial activity, as defined in PCT Article 33(2) to (4) have been satisfied for all the claims presented in the application entering the national stage (37 CFR 1.492(a)(4)) \$98.00</p> <p>[] and the above requirements are not met (37 CFR 1.492(a)(1)) \$720.00</p> <p>[X] U.S. PTO WAS NOT INTERNATIONAL PRELIMINARY EXAMINATION AUTHORITY Where no international preliminary examination fee as set forth in § 1.482 has been paid to the U.S. PTO, and payment of an international search fee as set forth in § 1.445(a)(2) to the U.S. PTO:</p> <p>[] has been paid (37 CFR 1.492(a)(2)) \$790.00</p> <p>[] has not been paid (37 CFR 1.492(a)(3)) \$1,070.00</p> <p>[X] where a search report on the international application has been prepared by the European Patent Office or the Japanese Patent Office (37 CFR 1.492(a)(5)) \$860.00</p>				
	Total of above Calculations				= \$860.00
SMALL ENTITY	Reduction by ½ for filing by small entity, if applicable. Affidavit must be filed. (note 37 CFR 1.9, 1.27, 1.28)				-
	Subtotal				\$860.00
	Total National Fee				\$860.00
	Fee for recording the enclosed assignment document \$40.00 (37 CFR 1.21(h)). (See Item 13 below). See attached "ASSIGNMENT COVER SHEET".				
TOTAL	Total Fees enclosed				\$860.00

PCT/PTO 09/868567

*See attached Preliminary Amendment Reducing the Number of Claims.

- i. ☒ Payment in the amount of \$860.00 to cover the above fees is enclosed.
- ii. ☐ Please charge Account No. _____ in the amount of \$ _____.
A duplicate copy of this sheet is enclosed.

3. ☒ A copy of the International application as filed (35 U.S.C. 371(c)(2)):
 - a. ☒ is transmitted herewith.
 - b. ☐ is not required, as the application was filed with the United States Receiving Office.
 - c. ☐ has been transmitted
 - i. ☐ by the International Bureau.
Date of mailing of the application (from form PCT/IB/308): _____.
 - ii. ☐ by applicant on _____.
Date
4. ☒ A translation of the International application into the English language (35 U.S.C. 371(c)(2)):
 - a. ☒ is transmitted herewith.
 - b. ☐ is not required as the application was filed in English.
 - c. ☐ was previously transmitted by applicant on _____.
Date
 - d. ☐ will follow.
5. ☐ Amendments to the claims of the International application under PCT Article 19 (35 U.S.C. 371(c)(3)):
 - a. ☐ are transmitted herewith.
 - b. ☐ have been transmitted
 - i. ☐ by the International Bureau.
Date of mailing of the amendment (from form PCT/IB/308): _____.
 - ii. ☐ by applicant on _____.
Date
 - c. ☐ have not been transmitted as
 - i. ☐ applicant chose not to make amendments under PCT Article 19.
Date of mailing of Search Report (from form PCT/ISA/210): _____.
 - ii. ☐ the time limit for the submission of amendments has not yet expired. The amendments or a statement that amendments have not been made will be transmitted before the expiration of the time limit under PCT Rule 46.1.
6. ☐ A translation of the amendments to the claims under PCT Article 19 (38 U.S.C. 371(c)(3)):
 - a. ☐ is transmitted herewith.
 - b. ☐ is not required as the amendments were made in the English language.
 - c. ☐ has not been transmitted for reasons indicated at point 5(c) above.

7. ☒ A copy of the international examination report (PCT/IPEA/409)
☒ is transmitted herewith.
☐ is not required as the application was filed with the United States Receiving Office.
8. ☐ Annex(es) to the international preliminary examination report
a. ☐ is/are transmitted herewith.
b. ☐ is/are not required as the application was filed with the United States Receiving Office.
9. ☐ A translation of the annexes to the international preliminary examination report
a. ☐ is transmitted herewith.
b. ☐ is not required as the annexes are in the English language.
10. ☒ An oath or declaration of the inventor (35 U.S.C. 371(c)(4)) complying with 35 U.S.C. 115
a. ☐ was previously submitted by applicant on _____.
Date
b. ☒ is submitted herewith, and such oath or declaration
i. ☒ is attached to the application.
ii. ☐ identifies the application and any amendments under PCT Article 19 that were transmitted as stated in points 3(b) or 3(c) and 5(b); and states that they were reviewed by the inventor as required by 37 C.F.R. 1.70.
iii. ☐ will follow.

Other document(s) or information included:

11. ☒ An International Search Report (PCT/ISA/210) or Declaration under PCT Article 17(2)(a):
a. ☒ is transmitted herewith.
b. ☐ has been transmitted by the International Bureau.
Date of mailing (from form PCT/IB/308): _____.
c. ☐ is not required, as the application was searched by the United States International Searching Authority.
d. ☐ will be transmitted promptly upon request.
e. ☐ has been submitted by applicant on _____.
Date
12. ☒ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98:
a. ☒ is transmitted herewith.
Also transmitted herewith is/are:
☒ Form PTO-1449 (PTO/SB/08A and 08B).
☒ Copies of citations listed.
b. ☐ will be transmitted within THREE MONTHS of the date of submission of requirements under 35 U.S.C. 371(c).
c. ☐ was previously submitted by applicant on _____.
Date

09/868567

- A separate [] "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING
NEW PATENT APPLICATION" or [] FORM PTO
1595 is also attached.

14. ☒ Additional documents:
- a. ☒ Copy of request (PCT/RO/101)
- b. ☒ International Publication No. WO 00/39899
- i. ☐ Specification, claims and drawing
- ii. ☒ Front page only
- c. ☒ Preliminary amendment (37 C.F.R. § 1.121)
- d. ☐ Other

15. [X] The above checked items are being transmitted
a. [X] before 30 months from any claimed priority date.
b. [] after 30 months.

W. S. Green
SIGNATURE OF PRACTITIONER

WERNER H. STEMER
REG. NO. 34,956

Lerner and Greenberg, P.A.
P.O. Box 2480
Hollywood, Florida 33020-2480
Tel.: (954) 925-1100
Fax: (954) 925-1101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : HELLEMANS, Roel
Applic. No.: PCT/EP99/10119
PCT Filed : December 20, 1999
Title : UNIT FOR AUTOMATICALLY CRIMPING RIBBONS OF FLEXIBLE
FLAT CABLE AND CORRESPONDING CRIMPING PROCESS

P R E L I M I N A R Y A M E N D M E N T

Hon. Commissioner of Patents,
Washington, D. C. 20231

S i r :

Preliminary to examination kindly amend the above-identified
application as follows:

In the Translated Specification:

Page 1, above line 6 and below the title, insert

-- Background of the Invention:

Field of the Invention: --.

Page 2, between lines 2 and 4, insert

-- Summary of the Invention: --.

Page 4, between lines 15 and 17, insert

-- Brief Description of the Drawings: --.

Page 5, above the first line, insert

-- Description of the Preferred Embodiment: --.

In the Claims:

Cancel claims 1-6 and enter the following new claims.

-- 7. A crimping unit for automatically crimping ribbons of flexible flat cable, the unit comprising:

a guide surface having a guide surface plane for guiding a ribbon of flat cable;

a plurality of crimping stations arranged vertically offset from said guide surface plane for crimping a connector onto an end of a branch of the ribbon; and

a plurality of tilting ramps each having a first end and a second end, and each being mounted to be tiltable towards said guide surface whereby said first end is brought into said guide surface plane and whereby said second end is even with a respective said crimping station, and wherein, when a respective said ramp is tilted toward said guide surface on command, a predetermined branch of the ribbon follows the ramp and travels to a respective said crimping stations and receives a connector.

8. The crimping unit according to claim 7, wherein each said ramp is associated with a given said crimping station for guiding a

branch of the ribbon of flat cable to said crimping station for crimping.

9. The crimping unit according to claim 7, wherein said guide surface drives the ribbon in two opposite directions of travel.

10. The crimping unit according to claim 7, which comprises a plurality of rollers having two directions of rotation, wherein the ribbon of flat cable is driven along said guide surface by said rollers.

11. The crimping unit according to claim 10, wherein said rollers driving the ribbon are vertically retractable for preventing damage to the connectors crimped onto the ribbon.

12. A crimping process for crimping connectors onto branches of ribbons of flexible flat cable, which comprises:

providing a crimping unit according to claim 7;

driving a ribbon of flat cable along a guide surface of the crimping unit;

issuing a command for tilting at least one tilting ramp for guiding at least one branch of the ribbon along the tilted ramp to a corresponding crimping station; and

crimping a connector onto the branch in the crimping station.

13. The method according to claim 12, which comprises crimping the connector onto the branch upon detecting a presence of an end of the branch in the crimping station. --

Remarks:

The preliminary amendment is being filed in an effort to present an application in proper U.S. format and to present claims in proper U.S. claim idiom for examination.

The newly entered claims are fully supported in the original claims, which were the subject of the Preliminary International Examination Report.

An early action on the merits of the claims is requested.

Respectfully submitted,



For Applicant

WERNER H. STEMER
REG. NO. 34,956

WHS:tk

June 15, 2001

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JG18 Rec'd PCT/PTO 1 5 JUN 2001

GR 98 P 5624

UNIT FOR AUTOMATICALLY CRIMPING RIBBONS OF FLEXIBLE FLAT CABLE
AND CORRESPONDING CRIMPING PROCESS

5

The present invention relates to a unit for automatically crimping ribbons of flexible flat cable and to a corresponding crimping process.

- 10 It is already known practice for very long flat cables to be used to make electrical connections inside a motor vehicle. These flat cables have the advantage of being of small thickness and therefore being able to be slipped behind the interior trim of the vehicle without ruining its appearance.
- 15 Furthermore, flat cables are lighter in weight than round cables and are less expensive. Of course, just like the round cables (that they replace), they are fitted with connectors at the end of each of their branches.
- 20 The crimping of these connectors is a lengthy and tricky operation. Because of the complexity of the bundles of cables, this crimping is often done manually. The branch that is to be crimped is commonly placed in the crimping machine by an operator. This leads to inevitable assembly errors, and very
- 25 few cable bundles are produced correctly first off. Such a method of performing the crimping entails setting up

systematic checks of each bundle, which correspondingly increases the manufacturing time.

The object of the present invention is to create a crimping unit in which the branch to be crimped is placed automatically in the crimping station. The desire is also to guarantee that the branches placed in a crimping station are always the right ones. This makes it possible to reduce the amount of checking to be performed and reduces the time taken to manufacture the ribbon of flat cable.

To this end, the present invention relates to a unit for automatically crimping ribbons of flexible flat cable, said ribbon comprising at least one branch onto which a connector is to be crimped, said unit being characterized in that it comprises:

- a guide surface on which the ribbon of flat cable travels,

- a number of crimping stations arranged vertically offset plumb with the plane of the guide surface and designed to crimp a connector onto the end of a branch, and

- a number of tilting ramps which have a first end even with

- the plane of the guide surface when they are in the tilted state and a second end even with a crimping station, said ramp

being arranged in the opposite direction to the direction of travel of the ribbon, each ramp being designed to tilt toward the guide surface on command so that a predetermined branch of the ribbon follows the ramp it encounters in its path as it travels along and so that it is directed to one of the crimping stations where it receives a connector.

Advantageously, the tilting of the ramp makes it possible to guarantee that only that branch of the ribbon that faces this ramp will be led up to the corresponding crimping station. According to the invention, there is no need to provide a specific means for driving the branch that is to be crimped because the ribbon is rigid enough that the branch for crimping will be driven along at the same time as the ribbon itself.

Of course, the ramps that lead each of the branches for crimping up to a crimping station will have a greater or lesser width according to the configuration of the ribbon of flat cable to be produced. This is because sometimes the branch for crimping contains just two tracks, and sometimes it contains a great many (some ten or so) tracks. In this case, the width of the ramp is tailored each time so that all of the tracks constituting the branch for crimping are directed to the crimping station. In consequence, the ramps according to the invention do not all have the same width. Furthermore, the

width of each ramp can be changed according to the ribbon to be produced. To this end, each crimping station has a set of ramps of varying widths. Each time a run of ribbons is to be produced, the appropriate ramps are placed in front of each

5 crimping station.

Advantageously, the tilting of a ramp can be programmed with respect to time. The various connectors can be placed one after another on each of the branches or may be crimped at the

10 same time.

Other objects, features and advantages of the present invention will in any case become apparent from the description which follows, by way of nonlimiting example, with

15 reference to the appended drawings in which:

- Figs. 1a and 1b are schematic views showing a ribbon of flat cable onto which connectors are to be crimped,

20 - Fig. 2 is a schematic side view of a crimping unit according to the invention, and

- Fig. 3 is a schematic view from above of the crimping unit according to Fig. 2.

25

Figs. 1a and 1b show a ribbon 10 of flat cable to be crimped. For the purposes of the description, this ribbon of flat cable is extremely simple because it consists of four tracks held together in a common connector 11 (to the left in the drawing). This ribbon splits into two branches 12 of different lengths, each consisting of two tracks. A connector 13 is placed at the end of each of these branches.

As Fig. 1b shows, these branches are intended to adopt different directions by folding and to supply accessories placed in the vehicle at different points.

The connector crimping unit 20 for producing such a ribbon 10 is depicted in figures 2 and 3.

This unit comprises three crimping stations 14a, 14b, 14c (in the particular embodiment of the ribbon depicted in Fig. 2). Of course, the number of crimping stations may vary according to the configuration of the branches to be crimped.

The crimping unit also comprises a guide surface 15 on which the ribbon of flat cable 10 is placed. This ribbon of flat cable is driven along a guide rail 16. The means of moving the ribbon consist of rollers 17 which can be rotated in two directions of rotation (clockwise and counterclockwise). The ribbon is driven by the friction of the rollers on the ribbon,

which causes this ribbon to move to the right or to the left (in the drawing), that is to say in two opposite directions of travel.

5 Each crimping station is placed above the ribbon (vertically offset), so that a tilting ramp 18a, 18b, 18c associated with it is plumb with the tracks of the branch on which it is to affix a connector.

10 In the state of rest, the tilting ramps 18a, b and c are in the position depicted in solid line in figure 2. The ribbon is therefore driven by the rollers 17 and travels unimpeded under the crimping stations 14a, b, c.

15 The automatic crimping process according to the invention is described hereinafter.

First of all, the common connector 11 is crimped on. To do this, the ribbon 10 is brought with the aid of the rollers 17 so that its left-hand end is to the right of the tilting ramp 18a. The tilting (dotted line, figure 2) of the ramp 18a toward the guide surface is then commanded. Thus, a first end of this ramp is positioned even with the guide surface 15 (in contact with this surface), while a second end of the ramp 18a is even with the crimping station 14a. The rollers 17 are then rotated so that the ribbon 10 is driven to the left. As the

The crimping process according to the present invention consists in:

- driving a ribbon of flat cable along a guide surface,

5

- commanding the tilting of at least one tilting ramp so that at least one branch of the ribbon follows the tilted ramp and is directed to a corresponding crimping station, and

10 - crimping a connector onto the branch when its presence in a crimping station is detected.

Of course, the present invention is not restricted to the embodiment described above. Hence, the crimping unit according to the present invention may have a number of crimping stations and a number of associated tilting ramps, this being according to the configuration of the branches to be crimped.

CLAIMS

1. A unit for automatically crimping ribbons of flexible flat cable, said ribbon comprising at least one branch onto which a connector is to be crimped, said unit being characterized in that it comprises:

- a guide surface on which the ribbon of flat cable travels,
- a number of crimping stations arranged vertically offset plumb with the plane of the guide surface and designed to crimp a connector onto the end of a branch, and
- a number of tilting ramps which have a first end even with the plane of the guide surface when they are in the tilted state and a second end even with a crimping station, said ramp being arranged in the opposite direction to the direction of travel of the ribbon, each ramp being designed to tilt toward the guide surface on command so that a predetermined branch of the ribbon follows the ramp it encounters in its path as it travels along and so that it is directed to one of the crimping stations where it receives a connector.

2. The crimping unit as claimed in claim 1, characterized in that each tilting ramp is associated with a given crimping station toward which it directs a branch of the ribbon of flat cable for crimping.

3. The crimping unit as claimed in claim 1 or 2,
characterized in that the guide surface drives the ribbon in
two opposite directions of travel.

5 4. The crimping unit as claimed in any of claims 1 to 3,
characterized in that the ribbon of flat cable is driven along
the guide surface by rollers which have two directions of
rotation.

10 5. The crimping unit as claimed in any of the preceding
claims, characterized in that the rollers driving the ribbon
along can retract vertically so that they do not damage the
connectors crimped onto the ribbon.

15 6. A crimping process employing the crimping unit as claimed
in any of the preceding claims, characterized in that it
consists in:

- driving a ribbon of flat cable along a guide surface,
- 20 - commanding the tilting of at least one tilting ramp so that
at least one branch of the ribbon follows the tilted ramp and
is directed to a corresponding crimping station, and
- crimping a connector onto the branch when its presence in a
crimping station is detected.

ABSTRACT

The present invention relates to a unit (20) for automatically crimping ribbons of flexible flat cable (10), said ribbon

5 comprising at least one branch (12) onto which a connector (11, 13) is to be crimped, said unit being characterized in that it comprises:

- a guide surface (15) on which the ribbon of flat cable (10) travels,

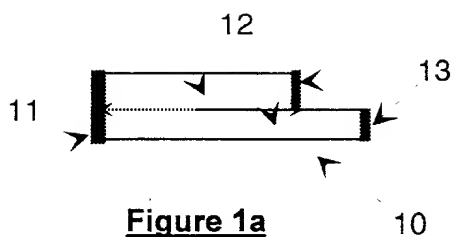
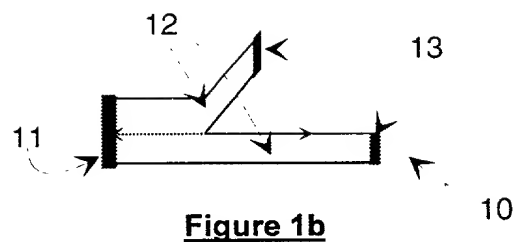
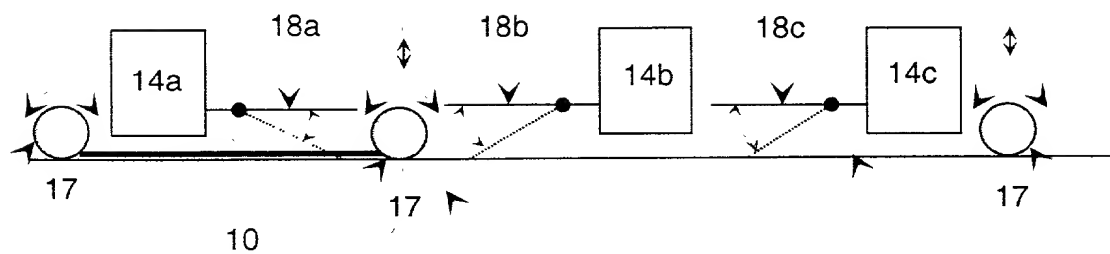
10 - a number of crimping stations (14a, 14b, 14c) arranged vertically offset plumb with the plane of the guide surface (15) and designed to crimp a connector (11, 13) onto the end of a branch (12), and

- a number of tilting ramps (18a, 18b, 18c) which have a first
15 end even with the plane of the guide surface when they are in the tilted state and a second end even with a crimping station, said ramp being arranged in the opposite direction to the direction of travel of the ribbon, each ramp being

20 predetermined branch (12) of the ribbon follows the ramp it encounters in its path as it travels along and so that it is directed to one of the crimping stations where it receives a connector (11, 13).

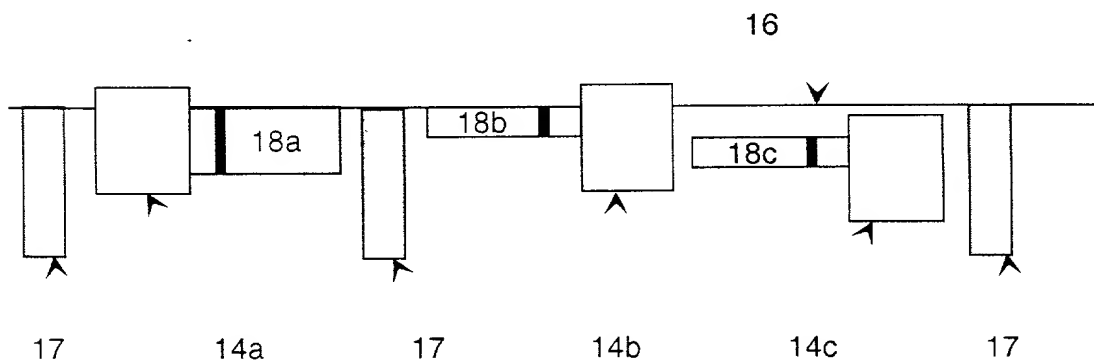
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Fig. 2

1 / 1

**Figure 1a****Figure 1b****Figure 2**

20

15

**Figure 3**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

French Language Declaration

POUVOIRS: En tant que l'inventeur cité, je désigne par la présente l'(les) avocat(s) et/ou agent(s) suivant(s) pour qu'ils poursuive(nt) la procédure de cette demande de brevet et traite(nt) toute affaire s'y rapportant avec l'Office des brevets et des marques: *(mentionner le nom et le numéro d'enregistrement).*

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: *(list name and registration number)*

Herbert L. Lerner (reg. 20,435)
Laurence A. Greenberg (reg. 29,308)
Werner H. Sterner (reg. 34,956)


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P.O. Box 2480
HOLLYWOOD, FL 33022 - 2480

Send Correspondence to:

Adresser tout appel téléphonique à:
(nom et numéro de téléphone)

Direct Telephone Calls to:
(name and telephone number)

LERNER & GREENBERG, P.A. Tel.: (954) 925-1100 FAX : (954) 925-1101

1-02 Nom complet de l'unique ou premier inventeur		Full name of sole or first inventor	
HELLEMANS Roel			
Signature de l'inventeur	Date	Inventor's signature	Date
	26/01/01		
Domicile		Residence	
Au Coucou. 32200 MONTIRON (FRANCE)			
Nationalité		Citizenship	
Hollandaise (NL)			
Adresse postale		Post Office Address	
Nom complet du second co-inventeur, le cas échéant		Full name of second joint inventor, if any	
Signature du second inventeur	Date	Second Inventor's signature	Date
Domicile		Residence	
Nationalité		Citizenship	
Adresse postale		Post Office Address	

(Fournir les mêmes renseignements et la signature de tout co-inventeur supplémentaire.)

(Supply similar information and signature for third and subsequent joint inventors.)

Declaration and Power of Attorney For Patent Application

Déclaration et Pouvoirs pour Demande de Brevet

French Language Declaration

En tant que l'inventeur nommé ci-après, je déclare par le présent acte que:

As a below named inventor, I hereby declare that:

Mon domicile, mon adresse postale et ma nationalité sont ceux figurant ci-dessous à côté de mon nom,

My residence, post office address and citizenship are as stated below next to my name,

Je crois être le premier inventeur original et unique (si un seul nom est mentionné ci-dessous), ou l'un des premiers co-inventeurs originaux (si plusieurs noms sont mentionnés ci-dessous) de l'objet revendiqué, pour lequel une demande de brevet a été déposée concernant l'invention intitulée :

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Unité de sertissage automatique de nappes de câbles plats flexibles et procédé de sertissage correspondant. _____

et dont la description est fournie ci-joint à moins que la case suivante n'ai été cochée:

the specification of which is attached hereto unless the following box is checked:

☒ a été déposée le 20-Dec-1999
sous le numéro de demande des Etats Unis ou le
numéro de demande internationale PCT
PCT / EP 99 / 10119 et modifiée le
_____ (le cas échéant)

☐ was filed on _____
as United States Application Number or PCT
International Application Number
_____ and was amended on
_____ (if applicable)

Je déclare par le présent acte avoir passé en revue et compris le contenu de la description ci-dessus, revendications comprises, telles que modifiées par toute modification dont il aura été fait référence ci-dessus.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

Je reconnais devoir divulguer toute information pertinente à la brevetabilité, comme défini dans le Titre 37, § 1.56 du Code fédéral des réglementations.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

French Language Declaration

Je revendique par le présent acte avoir la priorité étrangère, en vertu du Titre 35, § 119(a)-(d) ou § 365(b) du Code des Etats-Unis, sur toute demande étrangère de brevet ou certificat d'inventeur ou, en vertu du Titre 35, § 365(a) du même Code, sur toute demande internationale PCT désignant au moins un pays autre que les Etats-Unis et figurant ci-dessous et, en cochant la case, j'ai aussi indiqué ci-dessous toute demande étrangère de brevet, tout certificat d'inventeur ou toute demande internationale PCT ayant une date de dépôt précédant celle de la demande à propos de laquelle une priorité est revendiquée.

Prior foreign application(s)
Demande(s) de brevet(s) antérieure(s)

FR9816332 FRANCE

(Number) (Country)
(Numéro) (Pays)

(Number) (Country)
(Numéro) (Pays)

Je revendique par le présent acte tout bénéfice, en vertu du Titre 35, § 119(e) du Code des Etats-Unis, de toute demande de brevet provisoire effectuée aux Etats-Unis et figurant ci-dessous.

(Application No.) (Filing Date)
(N° de demande) (Date de dépôt)

(Application No.) (Filing Date)
(N° de demande) (Date de dépôt)

Je revendique par le présent acte tout bénéfice, en vertu du Titre 35, § 120 du Code des Etats-Unis, de toute demande de brevet effectuée aux Etats-Unis, ou en vertu du Titre 35, § 365(c) du même Code, de toute demande internationale PCT désignant les Etats-Unis et figurant ci-dessous et, dans la mesure où l'objet de chacune des revendications de cette demande de brevet n'est pas divulgué dans la demande antérieure américaine ou internationale PCT, en vertu des dispositions du premier paragraphe du Titre 35, § 112 du Code des Etats-Unis, je reconnais devoir divulguer toute information pertinente à la brevetabilité, comme défini dans le Titre 37, § 1.56 du Code fédéral des réglementations, dont j'ai pu disposer entre la date de dépôt de la demande antérieure et la date de dépôt de la demande nationale ou internationale PCT de la présente demande:

(Application No.) (Filing Date)
(N° de demande) (Date de dépôt)

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Je déclare par le présent acte que toute déclaration ci-incluse est, à ma connaissance, véridique et que toute déclaration formulée à partir de renseignements ou de suppositions est tenue pour véridique; et de plus, que toutes ces déclarations ont été formulées en sachant que toute fausse déclaration volontaire ou son équivalent est passible d'une amende ou d'une incarcération, ou des deux, en vertu de la Section 1001 du Titre 18 du Code des Etats-Unis, et que de telles déclarations volontairement fausses risquent de compromettre la validité de la demande de brevet ou du brevet délivré à partir de celle-ci.

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365 (b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below, and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Priority Claimed
Droit de priorité revendiqué

23-Dec-1998
(Day/Month/Year Filed)
(jour/mois/année de dépôt)

(Day/Month/Year Filed)
(jour/mois/année de dépôt)

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

(Status) (patented, pending, abandoned)
(Statut) (breveté, en cours d'examen, abandonné)

(Status) (patented, pending, abandoned)
(Statut) (breveté, en cours d'examen, abandonné)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.